

PENGARUH ASUPAN ASAM FOLAT DAN TEKANAN DARAH SISTOLIK TERHADAP KEMAMPUAN KOGNITIF LANJUT USIA DI PANTI WREDHA PUCANG GADING KOTA SEMARANG

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Penurunan kemampuan kognitif sebagai kondisi patologis melalui suatu penyakit degeneratif yang disebut *Dimensia Alzheimer*. Asupan asam folat dan tekanan darah sistolik merupakan faktor yang mempengaruhi penurunan kognitif lansia. Tujuan penelitian yaitu mengetahui besarnya pengaruh faktor-faktor tersebut terhadap kemampuan kognitif lansia. Penelitian ini merupakan penelitian penjelasan (*explanatory research*) dengan metode survei dan pendekatan waktu *cross sectional*. Pengambilan sampel dilakukan secara *Purposive Sampling*. Sampel adalah lansia dini(60-75)tahun dan lansia madya (76-90)tahun, yang sedang dalam kondisi sehat, di Panti Wredha Pucang Gading Kota Semarang Juni 2005. Sampel berjumlah 30 orang yang terdiri atas 60,0% pria dan 40% wanita. Data asupan asam folat dianalisis dengan program *nutrsoft*, sedangkan data tes kemampuan kognitif dianalisis dengan Formula Solomon. Hasil pengukuran asupan asam folat menunjukkan bahwa 100% responden termasuk dalam kategori asupan (<150 mikrogram/hari). Sebagian besar (53,3%) responden memiliki tekanan darah sistolik 160-179 mmHg (hipertensi sedang). Hasil pengukuran kemampuan kognitif menunjukkan bahwa 76,7% responden memiliki skor $\geq 0,9$, yang berarti tingginya tingkat probabilitas terhadap *Dimensia Alzheimer* (>99,9%). Besarnya pengaruh variabel bebas terhadap variabel terikat dianalisis dengan uji regresi linier ganda metode *Backward Elimination*, sehingga diperoleh hasil bahwa asupan asam folat berpengaruh terhadap kemampuan kognitif ($R=0,488$, dan R^2 23,8%), yang berarti 23,8% variabel kemampuan kognitif lansia dapat dijelaskan oleh asupan asam folat dan tekanan darah sistolik, sedangkan 76,2% dapat dijelaskan oleh sebab-sebab lain). Persamaan regresinya yaitu $Y=819,540-5,632X_1-0,770X_2$ (X_1 =asupan asam folat, X_2 =tekanan darah sistolik). Saran kepada pihak panti yaitu agar lebih meningkatkan pengetahuan pengelola makanan asrama mengenai menu seimbang dan pentingnya konsumsi zat gizi esensial otak, serta melakukan pemeriksaan tekanan darah rutin sebagai salah satu upaya mempertahankan dan mencegah penurunan kemampuan kognitif lansia.

Kata Kunci: asupan asam folat , tekanan darah sistolik, kemampuan kognitif, *Dimensia Alzheimer*, lansia, panto wredha

THE EFFECT OF FOLIC ACID INTAKE AND SISTOLIC BLOOD PRESSURE TO
COGNITIVE ABILITY IN LATE ADULTHOOD AT PANTI WREDHA PUCANG
GADING, SEMARANG MUNICIPALITY

Degeneration of late adulthood's cognitive ability may diagnosed as a pathological condition through Dimensia Alzheimer. Folic acid intake and systolic blood pressure are determinant factors of this case. This research was performed to investigate those determinant factors to the cognitive ability degeneration in late adulthood. This research was an explanatory research with cross sectional approach and survey method. It was conducted in Panti Wredha Pucang Gading Semarang on June 2005. Subject were healthy late adulthood between 60-75 and 76-90 years old. Subject were 30 late adulthood consist of 60% man and 40% woman. Data of folic acid intake analyzed by Nutrsoft, whether data of cognitive ability test analyzed by Formula Solomon. The results of this research show that 100% subject has less folic acid intake(<150 g/day). Most of subjects (53,3%)has systolic blood pressure between 160-179 mmHg(Mild Hypertention). Whether the cognitive ability test result shows that 76,7% subjects has a score 0,9 or more. It means most of subjects has a high probability of Dimensia Alzheimer (>99,9%). The effect of independent variable to the dependent variable was analyzed by multiple linear regression by Backward Elimination Method. The result shows that folic acid intake give an effect to the cognitive ability ($R=0,488$, and $R\text{ square }23,8\%$), it means 23,8% late adulthood's cognitive ability may determined by folic acid intake and systolic blood pressure, whether the rest (76,2%) may determined by others. The regression formula from those analysis is $Y=819,540-5,632X_1-0,770X_2$ (X_1 =folic acid intake , X_2 =systolic blood pressure). As an advice it would be better if the social institutional care could enrich the institutional food management about balance nutrition and the importance of folic acid intake as one of essential nutrition for brain, and also examine and control the late adulthood's blood pressure, as a way to prevent cognitive degeneration.

Keyword: *Folic acid intake, systolic blood pressure, cognitive ability, Dimensia Alzheimer, late adulthood, social institutional care*